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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	1	of	5
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**Complete if Known**

Application Number	10/714,795
Filing Date	November 17, 2003
First Named Inventor	Li et al.
Art Unit	3732
Examiner Name	
Attorney Docket Number	5853-376

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

Date  
Considered

9/5/05

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Sheet 2 of 5

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		SUN et al., "Time-frequency analysis for plastic landmine detection via forward-looking ground penetrating radar," IEE Proc.-Radar Sonar Navig., 150:253-261, 2003.	
		LI et al., "Target Detection with Synthetic Aperture Radar," IEEE Transactions on Aerospace and Electronic Systems, 32:613-627, 1996.	
		DANIELS, D., "An overview of RF sensors for mine detection: Part 3 Radar," <a href="http://demining.jrc.it/aris/events/mine99/program/P41-47/MINE-RAD.htm">http://demining.jrc.it/aris/events/mine99/program/P41-47/MINE-RAD.htm</a> , 1-9, 03/17/2004.	
		DE JONGH et al., "Design and analysis of new GPR antenna concepts," Delft University of Technology, Faculty of Information Technology and Systems International Research Centre for Telecommunications-transmission and Radar(IRCTR).	
		BUCHENAUER et al., "APERTURE EFFICIENCIES OF IMPULSE RADIATING ANTENNAS," Air Force Research Laboratory/DEHP, 91-108, 1999.	
		STOICA et al., "Robust Capon Beamforming," IEEE Signal Processing Letters, 10:172-175, 2003.	
		YERMAKOV, G., "THE EXACT SOLUTION OF THE PROBLEM OF ULTRA WIDEBAND SIGNALS RADIATION BY A TEM-HORN," DIPED-2002 Proceedings, 42-45.	
		LIU et al., "PULSE RADIATION ANTENNA FEEDED WITH A FACE-TO-FACE TEM HORN," IEEE, 447-450, 2000.	
		LI et al., "On Robust Capon Beamforming and Diagonal Loading," IEEE Transactions on Signal Processing, 51:1702-1715, 2003.	
		LI et al., "A Confocal Microwave Imaging Algorithm for Breast Cancer Detection," IEEE Microwave and Wireless Components Letters, 11:130-132, 2001.	

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		SUROWIEC et al., "Dielectric Properties of Breast Carcinoma and the Surrounding Tissues," IEEE Transactions on Biomedical Engineering, 35:257-263, 1988.	
		FEAR et al., "Confocal microwave imaging for breast tumor detection: application to a hemispherical breast model," IEEE MTT-S Digest, 1759-1762, 2002.	
		KRUGER et al., "Thermoacoustic Computed Tomography of the Breast at 434 MHz," IEEE MTT-S Digest, 591-594, 1999.	
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		XU et al., "Exact Frequency-Domain Reconstruction for Thermoacoustic Tomography-II: Cylindrical Geometry," IEEE Transactions on Medical Imaging, 21:829-833, 2002.	
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		XU et al., "Microwave-induced thermoacoustic tomography using multi-sector scanning," Am. Assoc. Phys. Med., 28:1958-1963, 2001.	
↓		XU et al., "Time-Domain Reconstruction for Thermoacoustic Tomography in a Spherical Geometry," IEEE Transactions on Medical Imaging, 21:814-822, 2002.	

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Sheet	4	of	5
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		NATIONAL ACADEMY OF SCIENCES, "Executive Summary," Mammography and Beyond: Developing Technologies for the Early Detection of Breast Cancer, <a href="http://www.nap.edu">http://www.nap.edu</a> , 2003.	
		NEWMAN, M., "Developing Technologies for Early Detection of Breast Cancer," A Public Workshop Summary, National Academy of Sciences, 2000.	
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		CADY, B., "Breast Cancer in the Third Millennium," Journal of Surgical Oncology, 77:225-232, 2001.	
		HAGNESS et al., "Three-Dimensional FDTD Analysis of a Pulsed Microwave Confocal System for Breast Cancer Detection: Design of an Antenna-Array Element," IEEE Transactions on Antennas and Propagation, 47:783-791, 1999.	
		KRUGER et al. "Thermoacoustic CT of the Breast," 4682-55, OptoSonics, Inc., <a href="http://www.optosonics.com">http://www.optosonics.com</a> .	
		WANG et al., "Microwave-induced acoustic imaging of biological tissues," Rev. Sci. Instrum., 70:3744-3748, 1999.	
		KU et al., "Combining Microwave and Ultrasound: Scanning Thermoacoustic Tomography," Proceedings of the 22nd Annual EMBS International Conference, Chicago, IL, 2321-2323, July 23-28, 2000.	
↓		CHAN et al., "MICROWAVE-INDUCED THERMOELASTIC TISSUE IMAGING," Biomagnetic and Microwave Imaging, IEEE Engineering in Medicine & Biology Society 10th Annual International Conference, 1988.	

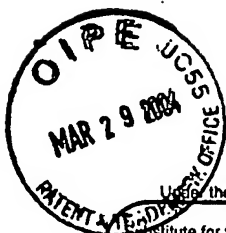
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Sheet 5	of 5	Attorney Docket Number	5853-376

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		HAGNESS et al., "Two-Dimensional FDTD Analysis of a Pulsed Microwave Confocal System for Breast Cancer Detection: Fixed-Focus and Antenna-Array Sensors," IEEE Transactions on Biomedical Engineering, 45:1470-1479, 1998.	
		GABRIEL et al., "The dielectric properties of biological tissues: III. Parametric models for the dielectric spectrum of tissues," Phys. Med. Biol., 41:2271-2293, 1996.	
		KRUGER et al., "THERMOACOUSTIC CT," IEEE MTT-S Digest, WE3D-4:933-936, 2000.	
		GOSCIN et al., "Magnetic Resonance Imaging of the Breast," Cancer Control, 8:399-406, 2001.	
		KINKEL et al., "MR Imaging: Breast Cancer Staging and Screening," Seminars in Surgical Oncology, 20:187-196, 2001.	
		WAXMAN, A., "PET: functional imaging applications in oncology," MEDICA/MUNDI, 46:12-18, 2002.	
		KAUL et al., "Early Detection of Breast Cancer: Is Mammography Enough?," Hospital Physician, www.turner-white.com, 2002.	
		GABRIEL et al., "The dielectric properties of Biological tissues: I. Literature survey," Phys. Med. Biol., 41:2231-2249, 1996.	
		GABRIEL et al., "The dielectric properties of Biological tissues: II. Measurements in the frequency range 10Hz to 20GHz," Phys. Med. Biol., 41:2251-2269, 1996.	

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		Number-Kind Code <sup>2</sup> (if known)			
MW		US- 6,104,942	08/15/2000	Kruger et al.	
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<i>MS</i>		DAVIS, S.K. ET AL., "Frequency-domain penalized least-squares beamformer design for early detection of breast cancer via microwave imaging," 2002 IEEE Sensor Array & Multichannel Signal Processing Workshop Proceedings, Piscataway, N.J., pp. 120-124 (August 2002)	

Examiner Signature	<i>Julianne M. Sullivan</i>	Date Considered	9/5/05
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